

Amendments to the Claims:

- 1 1. (currently amended) A method for policy-enabled, contract-based management of a
2 network operational support system that comprises a set of programs designed to
3 support various network management functions, comprising the steps of:
4 in response to a network system state change, receiving one or more conditions that
5 represent the current state of the network system;
6 determining whether native policies within the operational support system address the
7 one or more conditions;
8 in response to determining that the native policies do not address the one or more
9 conditions,
10 comparing the one or more conditions to one or more conditions addressed by
11 one or more policy views of respective one or more policy
12 management systems that are logically separate from the operational
13 support system;
14 based on comparing, determining at least one particular policy management
15 system that addresses the one or more conditions that represent the
16 current state of the network system;
17 requesting a policy view from ~~one or more~~ the at least one particular policy
18 management system[[s]] ~~that are logically separate from the~~
19 ~~operational support system~~, wherein the policy view comprises a set of
20 required policies that address one or more of the conditions that
21 represent the current state of the network system;

receiving one or more executable policies, from the at least one particular policy
management system, capable of supporting the required policies of the
requested policy view, wherein selection of the one or more executable
policies is based on a contract that defines one or more criteria that the
selected executable policies must satisfy; and
implementing the requested policy view by executing the selected executable policies.

2. (original) The method of Claim 1 wherein the operational support system comprises a
set of native policies indigenous to the operational support system, and further
comprising the step of identifying a behavioral exception when none of the native
policies is capable of supporting the requested policy view.

3. (original) The method of Claim 2 wherein the requesting step is carried out only in
response to a behavioral exception in the operational support system.

4. (original) The method of Claim 1 wherein the requesting step further comprises the
step of inventorying the available policy views of the policy management system.

5. (original) The method of Claim 1 wherein the policy management system comprises
an external policy engine, further comprising the step of causing the policy view to
initiate the contract for the selection and importation of the executable policies from
the external policy engine.

6. (original) The method of Claim 5 wherein the contract comprises one or more pre-
conditions, one or more post-conditions, one or more environmental requirements and
one or more policy dependency rules.

1 7. (original) The method of Claim 6 further comprising the step of causing the contract
2 to apply the environmental requirements to the selected executable policies to enable
3 the selected executable policies to run on the operational support system.

1 8. (original) The method of Claim 6 further comprising the step of causing the contract
2 to apply the policy dependency rules to two or more of the selected executable
3 policies when the behaviors of the two or more selected executable policies are in
4 conflict with one another.

1 9. (original) The method of Claim 1 wherein the policy management system comprises a
2 policy export engine, and the receiving step further comprises the step of importing
3 the selected executable policies from the policy export engine.

1 10. (currently amended) A method for policy-enabled, contract-based management of an
2 operational support system that comprises a set of programs designed to support
3 various network management functions, the method implemented by a policy kernel
4 in the operational support system that is communicatively coupled to one or more
5 policy management systems, comprising the steps of:
6 in response to a network system state change, receiving one or more conditions that
7 represent the current state of the network system;
8 determining whether native policies within the operational support system address the
9 one or more conditions;
10 in response to determining that the native policies do not address the one or more
11 conditions,

12 comparing the one or more conditions to one or more conditions addressed by
 13 one or more policy views of respective one or more policy
 14 management systems that are logically separate from the operational
 15 support system;
 16 based on comparing, determining at least one particular policy management
 17 system that addresses the one or more conditions that represent the
 18 current state of the network system;
 19 requesting a policy view from ~~one or more~~ the at least one particular management
 20 system[[s]], wherein the policy view comprises a set of required policies that
 21 address one or more of the conditions that represent the current state of the
 22 network system;
 23 receiving one or more executable policies₁ from the at least one particular policy
 24 management system₁ capable of supporting the required policies of the requested
 25 policy view, wherein selection of the one or more executable policies is based
 26 on a contract that defines one or more criteria that the selected executable
 27 policies must satisfy; and
 28 implementing the requested policy view by executing the selected executable policies.

- 1 11. (original) The method of Claim 10 wherein the policy kernel comprises a set of native
- 2 policies indigenous to the policy kernel, and further comprising the step of identifying
- 3 a behavioral exception when none of the native policies is capable of supporting the
- 4 requested policy view.

1 12. (original) The method of Claim 11 wherein the requesting step is carried out only in
2 response to a behavioral exception in the policy kernel.

1 13. (original) The method of Claim 10 wherein the requesting step further comprises the
2 step of inventorying the available policy views of the policy management system.

1 14. (original) The method of Claim 10 wherein the policy kernel comprises one or more
2 policy access points, and further comprising the step of enabling the policy access
3 points to provide an interface between the policy kernel and the policy management
4 system.

1 15. (original) The method of Claim 14 further comprising the step of inventorying the
2 available policy access points of the policy kernel.

1 16. (original) The method of Claim 14 wherein the policy access point is associated with
2 a particular policy management system among a plurality of policy management
3 systems.

1 17. (original) The method of Claim 14 further comprising the step of disabling the policy
2 access point to terminate the interface between the policy kernel and the policy
3 management system.

1 18. (original) The method of Claim 10 wherein the policy management system comprises
2 an external policy engine, further comprising the step of causing the policy view to
3 initiate the contract for the selection and importation of the executable policies from
4 the external policy engine.

1 19. (original) The method of Claim 18 wherein the contract comprises one or more pre-
2 conditions, one or more post-conditions, one or more environmental requirements and
3 one or more policy dependency rules.

1 20. (original) The method of Claim 19 further comprising the step of causing the contract
2 to apply the environmental requirements to the selected executable policies to enable
3 the selected executable policies to run on the policy kernel.

1 21. (original) The method of Claim 19 further comprising the step of causing the contract
2 to apply the policy dependency rules to two or more of the selected executable
3 policies when the behaviors of the two or more selected executable policies are in
4 conflict with one another.

1 22. (original) The method of Claim 10 wherein the policy management system comprises
2 a policy export engine, and the receiving step further comprises the step of importing
3 the selected executable policies from the policy export engine.

1 23. (currently amended) A method for policy-enabled, contract-based management of an
2 operational support system that comprises a set of programs designed to support
3 various network management functions, the method implemented by a policy kernel,
4 wherein the policy kernel comprises one or more policy access points and each policy
5 access point is associated with a particular policy management system, the method
6 comprising the steps of:
7 inventorying the policy access points of the policy kernel;

8 inventorying one or more policy views from one or more of the policy management
 9 systems, wherein the policy view comprises a set of required policies that address
 10 one or more conditions that represent the state of a network system;
 11 requesting one of the policy views from the inventory of policy views based on which
 12 policy view comprises one or more policies that address the current state of the
 13 network system being supported by the operational support system;
 14 enabling the policy access point corresponding to the associated policy management
 15 system capable of supporting the requested policy view;
 16 causing a contract of the requested policy view to be initiated for the selection of
 17 executable policies from an external policy engine of the policy management
 18 system;
 19 causing the contract to apply environmental requirements to the selected executable
 20 policies to enable the selected executable policies to ~~run~~ execute on the policy
 21 kernel;
 22 causing the contract to apply dependency rules to two or more of the selected
 23 executable policies when the behaviors of the two or more selected executable
 24 policies are in conflict with one another;
 25 importing the selected executable policies from a policy export engine of the policy
 26 management system; and
 27 implementing the requested policy view by executing the selected executable policies.

1 24. (currently amended) A computer-readable medium carrying one or more sequences of
 2 instructions for policy-enabled, contract-based management of a network operational
 3 support system that comprises a set of programs designed to support various network

4 management functions, which instructions, when executed by one or more processors,
5 cause the one or more processors to carry out the steps of:
6 in response to a network system state change, receiving one or more conditions that
7 represent the current state of the network system;
8 determining whether native policies within the operational support system address the
9 one or more conditions;
10 in response to determining that the native policies do not address the one or more
11 conditions,
12 comparing the one or more conditions to one or more conditions addressed by
13 one or more policy views of respective one or more policy
14 management systems that are logically separate from the operational
15 support system;
16 based on comparing, determining at least one particular policy management
17 system that addresses the one or more conditions that represent the
18 current state of the network system;
19 requesting a policy view from ~~one or more~~ the at least one particular policy
20 management system[[s]] ~~that are logically separate from the~~
21 ~~operational support system~~, wherein the policy view comprises a set of
22 required policies that address one or more of the conditions that
23 represent the current state of the network system;
24 receiving one or more executable policies, from the at least one particular policy
25 management system, capable of supporting the required policies of the
26 requested policy view, wherein selection of the one or more executable

27 policies is based on a contract that defines one or more criteria that the
 28 selected executable policies must satisfy; and
 29 implementing the requested policy view by executing the selected executable policies.

- 1 25. (currently amended) A system for policy-enabled, contract-based management of
 2 operational support systems that comprise a set of programs designed to support
 3 various network management functions, comprising:
 4 means for receiving, in response to a network system state change, one or more
 5 conditions that represent the current state of the network system;
 6 means for determining whether native policies within the operational support system
 7 address the one or more conditions;
 8 means for comparing the one or more conditions to one or more conditions addressed
 9 by one or more policy views of respective one or more policy management
 10 systems that are logically separate from the operational support system;
 11 means for determining at least one particular policy management system that
 12 addresses the one or more conditions that represent the current state of the
 13 network system;
 14 means for requesting a policy view from ~~one or more~~ the at least one particular policy
 15 management system[[s]] ~~that are logically separate from the operational~~
 16 ~~support system~~, wherein the policy view comprises a set of required policies
 17 that address one or more of the conditions that represent the current state of
 18 the network system;
 19 means for receiving one or more executable policies, from the at least one particular
 20 policy management system, capable of supporting the required policies of the

21 requested policy view, wherein selection of the one or more executable
22 policies is based on a contract that defines one or more criteria that the
23 selected executable policies must satisfy; and
24 means for implementing the requested policy view by executing the selected
25 executable policies.

1 26. (currently amended) A system for policy-enabled, contract-based management of
2 operational support systems that comprise a set of programs designed to support
3 various network management functions, comprising:
4 a policy kernel for executing policies of a policy view on the operational support
5 system; and
6 one or more policy access points that are communicatively coupled to one or more
7 policy management systems, the policy management system including one or
8 more executable policies and one or more policy views, the policy views
9 containing a set of required policies and a contract that defines one or more
10 criteria that the executable policies must satisfy.